



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0642; Directorate Identifier 2011-NM-262-AD; Amendment 39-17232; AD 2012-21-16]**

**RIN 2120-AA64**

**Airworthiness Directives; BAE SYSTEMS (OPERATIONS) LIMITED Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146 series airplanes and Model Avro 146-RJ series airplanes. This AD was prompted by hydraulic pipe ruptures in the center of the cabin resulting in passengers being contaminated with hydraulic fluid. This AD requires installing a hydraulic fluid containment system. We are issuing this AD to prevent harmful or hazardous concentrations of hydraulic fluid or hydraulic vapor from entering the passenger compartment, possibly resulting in injury to the passengers.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at

<http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 21, 2012 (77 FR 37340). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

Cases of hydraulic pipe ruptures in the centre of the cabin of BAe 146 aeroplanes have been reported, which have resulted in the passengers being contaminated with hydraulic fluid. The results of the investigations have shown that the pipe failures were caused by a combination of seam welded pipes, bends in the pipe runs with small bend radii and fatigue damage due to pressure variations.

This condition, if not corrected, could lead to harmful or hazardous concentrations of hydraulic fluid or hydraulic vapour entering the passenger compartment, possibly resulting in injury to the occupants.

For the reasons described above, this [European Aviation Safety Agency] AD requires the installation of a flexible envelope around the hydraulic pipe group where the failures have occurred to capture and contain any fluid escaping from a burst pipe and channel it below floor level into the forward cargo bay.

You may obtain further information by examining the MCAI in the AD docket.

## **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

## **Request for Exclusion of Airtankers**

Neptune Aviation Services requested a change in the text of paragraph (c) “Applicability,” of the NPRM (77 FR 37340, June 21, 2012) to include an “exemption” for an airplane operated as an “airtanker,” which does not carry passengers.

We partially agree with the request to change the text in paragraph (c) of this AD. We disagree with using the term “airtanker;” however, we have revised paragraph (c) to include an exception for airplanes in a non-passenger configuration.

## **Conclusion**

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously, except for minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 37340, June 21, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 37340, June 21, 2012).

## **Costs of Compliance**

We estimate that this AD will affect 1 product of U.S. registry. We also estimate that it will take about 8 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about

\$5,079 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$5,759.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 37340, June 21, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**2012-21-16 BAE SYSTEMS (OPERATIONS) LIMITED:** Amendment 39-17232.

Docket No. FAA-2012-0642; Directorate Identifier 2011-NM-262-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146-100A, -200A, and -300A airplanes, and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes; certificated in any category; except for airplanes operating in a cargo or non-passenger configuration. The requirements of this AD become applicable at the time an airplane operating in a cargo or non-passenger configuration is converted to a passenger configuration.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 29, Hydraulic power.

**(e) Reason**

This AD was prompted by hydraulic pipe ruptures in the center of the cabin resulting in passengers being contaminated with hydraulic fluid. We are issuing this AD to prevent harmful or hazardous concentrations of hydraulic fluid or hydraulic vapor from entering the passenger compartment, possibly resulting in injury to the passengers.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Actions**

Within 4,000 flight hours or 24 months after the effective date of this AD, whichever occurs first, install the hydraulic fluid containment system, in accordance with the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010.

**(h) Credit for Previous Actions**

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service bulletin specified in paragraph (h)(1) or (h)(2) of this AD.

(1) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, dated October 18, 2010 (which is not incorporated by reference in this AD).

(2) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 1, dated November 5, 2010 (which is not incorporated by reference in this AD).

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Information may be emailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(j) Related Information**

(1) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0220, dated November 11, 2011; and BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010; for related information.

(2) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email [RApublications@baesystems.com](mailto:RApublications@baesystems.com); Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010.

(ii) Reserved.

(3) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207;

fax +44 1292 675704; email [RApublications@baesystems.com](mailto:RApublications@baesystems.com); Internet

<http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 14, 2012.

John P. Piccola,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-26185 Filed 10/30/2012 at 8:45 am; Publication Date: 10/31/2012]